## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Lee et al.

Attorney Docket No.:

NOVLP033X1/NVLS-000498X1

Application No.: UNASSIGNED

Examiner: UNASSIGNED

Filed: HEREWITH

Group: UNASSIGNED

Title: METHOD FOR DEDUC

Title: METHOD FOR REDUCING TUNGSTEN FILM ROUGHNESS AND IMPROVING

STEP COVERAGE

## INFORMATION DISCLOSURE STATEMENT 37 CFR §§1.56 AND 1.97(b)

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

The references listed in the attached PTO Form 1449 may be material to examination of the above-identified patent application. Applicants submit the list of these references in compliance with their duty of disclosure pursuant to 37 CFR §§1.56 and 1.97. The Examiner is requested to make these references of official record in this application. The above-identified application is a continuation-in-part of prior application U.S. Patent Application No. 09/975,074. This prior application is being relied upon for an earlier filing date under 35 U.S.C. § 120. Because the listed references were either cited by the PTO, or submitted to the PTO in the prior application, under 37 CFR § 1.98(d) Applicants submit that copies need not be provided.

This Information Disclosure Statement is not to be construed as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that these references indeed constitute prior art.

This Information Disclosure Statement is: (i) filed within three (3) months of the filing date of the above-referenced application, (ii) believed to be filed before the mailing date of a first Office Action on the merits, or (iii) believed to be filed before the mailing of a first Office Action after the filing of a Request for Continued Examination under §1.114. Accordingly, it is believed that no fees are due in connection with the filing of this Information Disclosure Statement. However, if it is determined that any fees are due, the Commissioner is hereby authorized to charge such fees to Deposit Account 500388 (Order No. NOVLP033X1).

Respectfully submitted,

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Form 1449 (Modified)	Atty Docket No. NOVLP033X1/NVLS- 000498X1	Application No.: UNASSIGNED
Information Disclosure	Applicant:	
Statement By Applicant	Lee et al.	
	Filing Date	Group
(Use Several Sheets if Necessary)	HEREWITH	UNASSIGNED

## **U.S. Patent Documents**

Examiner						Sub-	Filing
Initial	No.	Patent No.	Date	Patentee	Class	class	Date
	A1	6,143,082	11/07/00	McInerney et al.			
	A2	5,795,824	08/18/98	Hancock			
	A3	4,804,560	2/89	Shioya et al.			
<del></del>	A4	5,661,080	08/97	Hwang et al.			
	A5	5,726,096	3/98	Jung			1
	A6	5,804,249	9/98	Sukharev et al.			
	A7	6,294,468	09/01	Gould-Choquette et			
				al.		:	
	A8	5,391,394	02/95	Hansen			
	A9	6,245,654	06/01	Shih et al.			
	A10	6,297,152	10/01	Itoh et al.			
	A11	6,265,312	07/01	Sidhwa et al.			
	A12	5,956,609	09/99	Lee et al.			1
	A13	6,309,966	10/01	Govindarajan et al.			
	A14	5,250,329	10/93	Miracky et al.			
	A15	6,066,366	5/00	Berenbaum et al.			
	A16	5,817,576	10/98	Tseng et al.			
	A17	5,326,723	07/94	Petro et al.			
	A18	5,028,565	07/91	Chang et al.			

Foreign Patent or Published Foreign Patent Application

Examiner		Document	Publication	Country or		Sub-	Trans	slation
Initial	No.	No.	Date	Patent Office	Class	class	Yes	No
	B1							
		***					<del> </del>	<del> </del>
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## **Other Documents**

Examiner		
Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
		George et al., "Surface Chemistry for atomic Layer Growth", J. Phys. Chem, 1996, vol. 100, no, 31, pgs. 13121-13131.

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	C2	Bell et al., "Batch Reactor Kinetic Studies of Tungsten LPCVD from Silane and Tungsten Hexafluoride", J. Electrochem. Soc., January 1996, Vol. 143, No. 1, pgs. 296-302.		
	C3	Klaus et al., "Atomically controlled growth of Tungsten and Tungsten nitride using sequential surface reactions", Applied Surface Science, 162-163 (2000) 479-491.		
	C4	Klaus et al., "Atomic layer deposition of tungsten using sequential surface chemistry with a sacrificial stripping reaction", Thin Solid Films 360 (2000) 145-153.		
Examiner		Date Considered		

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.